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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/568,197	02/09/2006	Robert Kagermeier	11371-92	8132
Brinks Hofer Gilson & Lione Suite 3600 455 No Cityfront Plaza Drive Chicago, IL 60611-5599				
7590 03/19/2009			EXAMINER NGUYEN, NAM V	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/568,197

**Applicant(s)**

KAGERMEIER ET AL.

**Examiner**

Nam V. Nguyen

**Art Unit**

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 February 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-24 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 09 February 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 2/9/06  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

The application of Kagermeier et al. for a “radio operating system and method for operating a radio system” filed February 9, 2006 has been examined.

This application claims foreign priority based on the application 103 36 731.4 filed august 11, 2003 in Germany. Receipt is acknowledged of papers submitted under 35 U.S.C 119(a) – (d), which papers have been placed of record in the file.

This application claims priority to a 371 of PCT/EP04/07954, which is filed on July 16, 2004.

A preliminary amendment to the claims 1-17 has been entered and made of record. A new set of claims 17-24 are introduced.

Claims 1-24 are pending.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to label boxes (2, 4 and 7-10) in Figure 1 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-17 and 21-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the transmission quality" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 12 recites the limitation "the parties" in line 2. There is insufficient antecedent basis for this limitation in the claim. "the parties" should be "the units".

Referring to 7-17 and 21-24 are rejected as being dependent upon a rejected Claim 6 above.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-2, 4, 6-9, 13, 16, 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2).

Referring to claim 1, Davies et al. disclose a remote control system (i.e. a radio operating system) (column 1 lines 53 to 62; see Figures 1-5), comprising:

a radio receiver (not shown) (i.e. a radio base station unit) for configured to control a target device (120) (i.e. a device) (column 2 lines 25 to 32; see Figure 1); and

a remote controller (100) (i.e. an operating unit) in communication with the radio receiver of a target device (120) (i.e. the radio base station unit of the device) (column 2 lines 55 to 32; column 4 lines 35 to 44; see Figures 1 to 4);

wherein a selection is provided between a plurality of operating system (i.e. a plurality of operating modes) of the remote controller (100) (i.e. the operating unit), the selection corresponding to a range (i.e. a value of a reception parameter) with respect to a feedback range (i.e. a threshold value) (column 4 lines 16 to 22; see Figure 5);

when the feedback range value that detected by the detector (220) (i.e. the reception parameter value) is less than the threshold value, the remote controller operates in IR mode process (i.e. a safety-oriented operating mode is selected) and if the feedback range value that detected by the detector (220) (i.e. the reception parameter) is greater than the threshold value the remote controller operates in RF mode process (i.e. a standard operating mode is selected) (column 4 lines 17 to 44; see Figure 5).

However, Davies et al. did not explicitly disclose a first, non-safety-critical command set, activatable by means of the operating is usable in each of the operating modes; a second, safety-critical command set, activatable by means of the operating is usable in the safety-oriented operating mode, when the second command set has is enable.

In the same field of endeavor of remote control system, Rodriguez et al. teach a set of functionality command not in channel type of based on pre-selected types of channels (i.e. a first, non-safety-critical command set), activatable by means of a home digital terminal (or a television) (i.e. the operating unit) is usable in standard mode or parental control mode (i.e. in each of the operating modes) (column 19 line 60 to column 20 lines 46; an another set of

functionality command in channel type of based on pre-selected types of channels such as parental control channel (i.e. a second, safety-critical command set), activatable by means of the operating unit is usable in the parental control mode (i.e. the safety-oriented operating mode), when the valid password command is entered (i.e. the second command set has is enable) (column 20 lines 47 to column 65; see Figures 23 to 27) in order to control the functional command in the way the user's intent.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the remote control system with plurality of functional commands operate depend on the mode selection of the remote control system which taught by Rodriguez et al. in the adaptive remote control system with detector to configure the operational process depend on the feedback range of Davies et al. because having the remote control system with plurality of functional commands operate depend on the mode selection of the remote control system would increase functionality to configure depend on the remote controller of the remote control system.

Referring to claim 6, Davies et al. in view of Rodriguez et al. disclose a method for operating a radio system having at least two units, to the extent as claimed with respect to claim 1 above, and Davies discloses the detector (220) of a remote controller (200 or 300) configures to sense the tags from the transmitted infrared signal (i.e. measuring the transmission quality) and determines the distance (i.e. reception parameter) between the first and second units. From the sensed information, the detector (220) determines if the remote controller is within the target device feedback range (column 3 lines 7 to 30; see Figures 1 to 3). Furthermore, the detectors

(220) also measures the audible hearing distance (i.e. measuring the transmission quality) between the remote controller and the target device, from this measuring audible hearing distance to determine the feedback range (i.e. reception parameter) (column 3 lines 31 to 37).

Referring to Claims 2 and 7, Davies et al. in view of Rodriguez et al. disclose the method and the radio operating system as in claims 1 and 6, Rodriguez et al. disclose wherein actuation of a select key (420) or a confirm key (A) (471) (i.e. a confirmation input device), enables the safety-critical command set (column 12 lines 20 to 29; see Figure 4 and 28-29).

Referring to Claims 4 and 19, Davies et al. in view of Rodriguez et al. disclose the method and the radio operating system as in claims 1-2, Davies et al. disclose wherein the operating unit (200) has a user interface (230) is a sound (i.e. an acoustic output device) (column 4 lines 4 to 7; see Figure 2).

Referring to Claims 8-9, Davies et al. in view of Rodriguez et al. disclose the method as in claim 7, Rodriguez et al. disclose wherein actuation of a select key (420) or a confirm key (A) (471) (i.e. a confirmation input device), enables the safety-critical command set in a time period (column 12 lines 20 to 56; see Figure 4 and 28-29).

Referring to Claims 13 and 24, Davies et al. in view of Rodriguez et al. disclose the method as in claims 6-7, Davies et al. disclose wherein the feedback range (i.e. the reception



parameter) contains information representing the reception quality of the radio communication between the units (column 2 lines 33 to 43; column 4 lines 16 to 22; see Figure 5).

Referring to Claim 16, Davies et al. in view of Rodriguez et al. disclose the method as in claim 6, Davies et al. disclose wherein the reception parameter includes information representing the range (i.e. the distance) between the remote controller (100) and the target device (120) (i.e. the units) (column 2 lines 33 to 43; column 4 lines 16 to 22; see Figures 1-2).

2. Claims 3, 14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 1, and in further view of Omata et al. (US# 6,624,758 B1).

Referring to Claims 3 and 18, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claims 1-2, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein the operating unit has a display device provided for displaying the operating mode.

In the same field of endeavor of remote control system, Omata et al. teach the operating unit (2) has a display device (4) provided for displaying the operating mode (72) (column 10 lines 20 to 43; see Figures 8-14) in order to report to the operator.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a display in the remote control to display the operational mode taught by Omata et al. in the adaptive remote control system with detector to configure the operational

process depend on the feedback range of Davies et al. in view of Rodriguez et al. because having the mode display on the display of the remote control would help the remote operator to know the operational status of the remote control device.

Referring to Claim 14, Davies et al. in view of Rodriguez et al. disclose the method as in claim 13, Omata et al. disclose wherein the reception parameter contains information representing the reception field intensity at the location of one of the units (column 17 lines 42 to 51; column 24 lines 56 to 67; see Figures 1 and 17) in order to confirm the communication range between the two units in the remote communication system.

Referring to Claim 17, Davies et al. in view of Rodriguez et al. disclose the method as in claim 16, Omata et al. disclose wherein the reception parameter is ascertained by transit time measurement (column 5 lines 33 to 48; column 18 lines 16 to 28; see Figure 2).

3. Claims 5 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 1, and in further view of Bloch et al. (US# 7,054,594 B2).

Referring to Claims 5 and 20, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claims 1 and 19, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein when the reception parameter is less than a second threshold value the radio connection between the operating unit and the radio base station unit is disabled.

In the same field of endeavor of remote control communication system, Bloch et al. teaches when the range (i.e. the reception parameter) is out of communication range (i.e. a second threshold value) the radio connection (12) between the operating unit (10) and the radio base station unit (20) is disabled (column 5 lines 21 to 47) in order to restrict receive delivery of the user information in a portable device.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize if the device is out of communication range, the device will not able to communicate with other portable device taught by Bloch et al. in the adaptive remote control system with detector to configure the operational process depend on the feedback range of Davies et al. in view of Rodriguez et al. because if the device is out of communication range, the device will not able to communicate with other portable device would increase security in a portable communication remote control device.

4. Claims 10 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claims 6-7 and in further view of Walter (US# 6,275,141 B1).

Referring to Claims 10 and 21, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein upon switchover from the standard operating mode to the safety-oriented operating mode, an optical report is output.

In the same field of endeavor of remote control system, Walter teaches upon switchover from the standard operating mode to restricted access valet mode (i.e. the safety-oriented operating mode), a LED flashing with different frequency (an optical report) is output (column 10 lines 49 to 58; see Figure 1) in order to alert user.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using a LED flashing to indicate a mode is changed taught by Walter in the adaptive remote control system of Davies et al. in view of Rodriguez et al. because having a LED flashing to indicate the mode is changed would alert the user that the mode has been change in the remote control system.

5. Claims 11 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to claims 6-7, and in further view of Hoehne (US# 5,957,776).

Referring to Claims 11 and 22, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein when a function associated with the safety-critical command set is chosen in the safety-oriented operating mode, an acoustic signal is output.

In the same field of endeavor of remote control operation system, Hoehne teaches an audible horn (82) beeps every time one of the key is depressed on keypad (58) by a user in an operation mode (column 10 lines 21 to 25; column 10 lines 36 to 44; see Figure 4) in order to alert the correct signal is send to the host control unit.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the audible horn to beep every time when a keypad is depressed taught by Hoehne in the user control input of the adaptive remote control system of Davies et al. in view of Rodriguez et al. because having the audible horn to beep every time when a key is depressed in the operation mode would alert the user that a functional command is transmitted to the remote control system.

6. Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to claims 6-7, and in further view of Maloney (US# 7,336,174 B1).

Referring to Claims 12 and 23, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claims 6-7, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein if the radio communication between the parties is disabled because of the transmission quality, an acoustic signal is output.

In the same field of endeavor of remote control operation system, Maloney teaches wherein if the radio communication between the parties is disabled because of the transmission quality, an acoustic signal is output (column 4 lines 22 to 36) in order to alert user that the communication is moved out of range of the reader.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize to alert user with sound when the object is moved out range of the reader taught by Maloney in the user control input of the adaptive remote control system of Davies et al.

in view of Rodriguez et al. because using a sound to alert user that the communication between reader and objects are weak would alert the user that the communication is out of range for communication in the remote control system.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Davies et al. (US# 6,753,790 B2) in view of Rodriguez et al. (US# 7,120,922 B2) as applied to Claim 13, and in further view of Serfaty et al. (US# 5,722,046).

Referring to Claim 15, Davies et al. in view of Rodriguez et al. disclose the radio operating system as in claim 13, however, Rodriguez et al. in view of Rodriguez et al. did not explicitly disclose wherein the reception parameter includes information the bit error rate of the radio communication between the units.

In the same field of endeavor of remote control operation system, Serfaty et al. teaches a reception parameter includes information the bit error rate of the radio communication between transmitter (10) and a receiver (11) (column 6 lines 64 to 67; column 7 lines 17 to 63; see Figures 5-7) in order to determine power modes of the receiver to save battery power.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to recognize using the bit error rate of the radio communication between the transmitter and the receiver taught by Serfaty et al. in the adaptive remote control system of Davies et al. in view of Rodriguez et al. because using the bit error rate of the radio communication between the transmitter and the receiver would improve battery power by switching to the appropriate mode for communication in the remote control system.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Perez et al. (US# 5,289,163) disclose a child position monitoring and locating device.

Yoshida (US# 6,651,900) discloses a control apparatus for a fire pump, operation display apparatus for a fire pump and operation mode control apparatus for a fire pump.

Stefanik (US# 6,903,655) discloses a remote control device with illumination.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nam V. Nguyen whose telephone number is 571-272-3061. The examiner can normally be reached on Mon-Fri, 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Brian Zimmerman can be reached on 571- 272-3059. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/N. V. N./  
Examiner, Art Unit 2612

/Brian A Zimmerman/  
Supervisory Patent Examiner, Art Unit 2612